DOCUMENT RESUME

ED 277 715 TM 860 655

AUTHOR Abraham, Ansely A.
TITLE College-Level Study: What Is It? Variations in College Placement Tests and Standards in the SREB States. Issues in Higher Education, Number 22.
INSTITUTION Southern Regional Education Board, Atlanta, Ga.
PUB DATE 86
NOTE 7p.
PUB TYPE Reports - Research/Technical (143) -- Collected Works - Serials (022)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Academic Standards; Admission Criteria; College Admission; *College Curriculum; *College Entrance Examinations; Colleges; Cutting Scores; Equivalency Tests; Higher Education; Mathematics Tests; Reading Tests; *Remedial Instruction; School Surveys; *Student Placement; Two Year Colleges; Writing Evaluation
IDENTIFIERS Southern Regional Education Board

ABSTRACT

A survey was conducted among 489 public colleges in the Southern Regional Education Board states to determine cutting scores for placing students into regular versus remedial college classes. Results indicated a large number and variety of tests in reading, writing, and mathematics--almost 100 combinations of 70 different tests--were used to place students. Both locally-developed and standardized tests were used. Thirty-one different reading tests were reported, most frequently the Nelson-Denny Reading Tests, the American College Test, Multiple Assessment Programs and Services--Descriptive Test of Language Skills (MAPS-DTLS), and the verbal Scholastic Aptitude Test. Thirty different writing tests were reported, including the American College Test--English, a sample essay, and a locally developed test. For mathematics, 118 colleges used an in-house test. In addition, 36 testing instruments were named, including the American College Test--Mathematics, Scholastic Aptitude Test, and MAPS. An examination of the cut-off scores used by the different colleges indicated a wide range of standards. On a reading test, the percentage of students eligible for college-level placement ranged from 57 percent to 99 percent, and on a mathematics test, from 6 percent to 86 percent. (GDC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED277715

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

COLLEGE-LEVEL STUDY: WHAT IS IT?

Variations in College Placement Tests and Standards in the SREB States

Why is it that in one college students need only a 7th grade reading level to begin credit work toward a degree, while at another college, students must read at the 13th grade level to enroll in degree-credit courses?

What does it mean that at one college students can score at the first percentile on a reading test (meaning that 99 percent of the students who took the test scored higher) and begin degree-credit courses, while at another college, students must score at the 43rd percentile to start degree-credit work?

And in mathematics, "the language of science," how does one interpret the fact that one college requires students to score at the 14th percentile to begin college-level mathematics, while at another, students are required to score at the 94th percentile?

What does it mean that nearly 100 test combinations of 70 different tests in reading, writing, and mathematics are used by colleges and universities in the SREB states to place students into degree-credit programs?

Institutions have different missions—and all are certainly not to be judged by ivy-league standards—but isn't it possible to have some general agreement about what constitutes college-level work?

An SREB study would seem to show that the wide variation among institutions in college placement standards means that there is very little consensus on what college-level work is. It is difficult to improve undergraduate education when what passes for college work may be at an advanced level or it may be at a high school level. Perhaps the first question to be answered in individual states is "How does the lack of agreement on what college-level work means affect the quality of undergraduate education?"

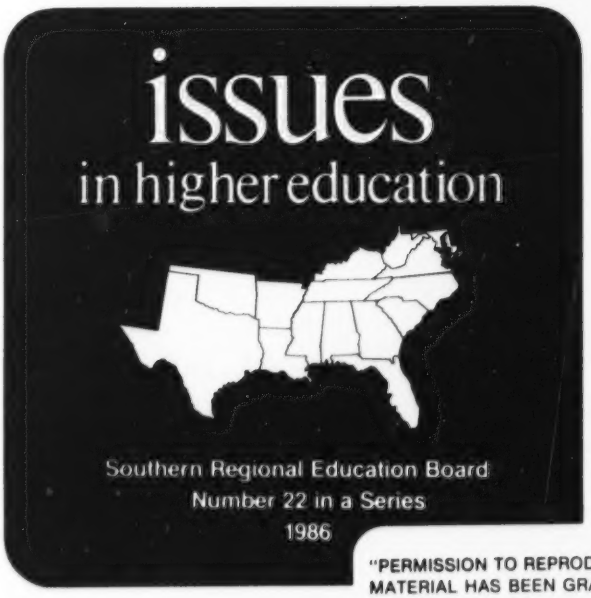
Placement versus Admission Standards

In discussions of entry-level standards for college, it is often confusing whether placement standards or admission standards are being addressed. While at times the standards or terms may be used interchangeably, this SREB study deals with standards for placement. Placement standards are used after students are admitted to college to help determine whether they are ready to begin degree-credit work. If students have the necessary skills, they are placed in degree-credit (regular) college courses. If they do not, they are placed in remedial/developmental programs.

The admissions process, however, is different. Students are admitted who may lack the skills necessary to begin college-level work. For example, institutions with open-door admission policies may admit a majority of students who may not be ready to begin regular college work. Even institutions that require standards for admission often admit students who need additional assistance. This, of course, is not as big a problem in the institutions with more selective admissions criteria. Obviously, the more selective an institution, the fewer the number of students who will need assistance.

SREB Placement Survey

Educational reforms, especially those that concern standards and quality, are bringing to light the fact that colleges and universities use few common standards to make placement decisions—that is, decisions about



"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
M. A. Sullivan
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

TM 860 655

whether entering students are ready to begin college-level work or whether they need remedial help. This raises the question, "What standards are being used by institutions of higher education in the SREB region to place students in appropriate levels of study?" An SREB survey of institutional remedial developmental programs in two-year and four-year colleges attempts to answer this question. Specifically, the survey describes the particular standards required by colleges and universities for placement into regular college degree-credit programs. "Standards" are defined here as the qualifying (cut-off) scores on particular tests required by institutions.

The survey was sent to 489 public two-year and four-year colleges in the SREB states; 186 were four-year and 303 were two-year institutions. *The overall response rate for the survey was 83 percent—88 percent for four-year institutions and 79 percent for two-year institutions.* Institutions were asked to identify the assessment instruments and scores required in the areas of reading, writing, and mathematics to place students at either the remedial/developmental level or "regular" college-work level.

100 Test Combinations Used for College Placement

In the SREB states, almost 100 combinations of about 70 different tests in the areas of reading, writing, and mathematics are used to place students in either college degree-credit or remedial development courses. Tests in all three areas range from in-house institutionally developed exams to nationally normed and standardized tests, such as the American College Test (ACT) or the Scholastic Aptitude Test (SAT). Some institutions use more than one test. A listing of the reading, writing, and mathematics tests used by colleges and universities in the SREB states will be found on page 5.

The large number and variety of tests that are used raise several questions. First is whether these tests measure different abilities and skills, or do they measure essentially the same abilities and skills? If the tests measure different abilities and skills, then it would be quite appropriate to choose different tests to "fit" the particular purposes determined by individual institutions. However,

TABLE 1

College Placement Tests Used By SREB Survey Respondents, by Rank, for Reading, Writing, and Mathematics 1985-86

	READING		WRITING		MATHEMATICS	
Rank	Placement Test	Frequency of Use	Placement Test	Frequency of Use	Placement Test	Frequency of Use
1	Nelson-Denny	121	ACT—English	72	In-house/Institutionally Developed	118
2	ACT—Combined	43	In-house/Institutionally Developed	66	ACT—Mathematics	71
3	MAPS—Descriptive Test of Language Skills	37	Writing Sample/Essay	57	SAT—Mathematics	47
4	SAT—Verbal	35	Test of Standard Written English	53	MAPS—Descriptive Test of Mathematics Skills—Elementary Algebra	36
5	ASSET	29	ACT—Combined	36	State/System Developed Test	29
6	State/System Developed Test	27	SAT—Verbal	28	MAPS—Descriptive Test of Mathematics Skills—Intermediate Algebra	27
7	ACT—Social Studies	26	State/System Developed Test	28	ACT—Combined	26
8	MAPS—Comparative Guidance Placement Test—Reading	23	ASSET—Language Usage	24	MAPS—Comparative Guidance Placement—Mathematics C Test	23
9	ACT—English	18	MAPS—Comparative Guidance Placement Test—Writing	24	MAPS—Descriptive Test of Mathematics Skills—Arithmetic	22
10	Test of Adult Basic Education	12	Assessment and Placement Services for Community Colleges—Essay	15	ASSET—Numerical	17

BEST COPY AVAILABLE

if tests measure the same abilities and skills, then different tests may be chosen based on marketing strategies of test makers, ease of use, cost, popularity, validity, prestige, or perceived appropriateness. It is also reasonable to assume that the large variety of tests in use implies a lack of uniform standards for what is usually considered "college-level" work. Further, the many tests could indicate that there is little consensus as to the kind and level of skills and knowledge students need to begin college-level study.

Table 1 lists the 10 tests in reading, writing, and mathematics most commonly used in SREB states.

For reading, 31 different tests are identified by institutions for entry-level placement. The Nelson-Denny Reading Test is by far the most frequently used reading test (121 institutions). It is also used more frequently than any of the writing or mathematic tests. In addition to the Nelson-Denny, frequently used reading tests include the ACT (43 institutions), MAPS-DTLS (37 institutions), and SAT-Verbal (35 institutions).

For writing, the institutions reported 30 different tests. Two of the top three writing placement tests were identified by these institutions as in-house/institutionally developed and writing sample/essay. Also, note that institutions using the various writing tests are more evenly distributed than in either the reading or mathematics areas. These factors suggest a lack of consensus and indicate that institutions obviously have not found any one measure of writing skills which they believe to be clearly better than others. This may be explained in part by the difficulty in determining writing skills objectively as compared to reading or mathematics skills.

For mathematics placement, 36 testing instruments were identified. It is interesting that the majority of colleges (118 institutions) chose in-house/institutionally developed math tests as the most frequently used method for college-level placement—this means 118 different tests for establishing math placement. Also shown in Table 1 for the top 10 mathematic tests is the popular use of the MAPS testing series; 4 forms of this test are among the top 10. The data in Table 1 provide a clear indication of the variety of tests used by institutions in the SREB region to place students in college-level courses.

The fact that many different tests are used would not necessarily mean that there is a lack of "common" standards. However, a wide range of cut-off scores on those tests would show conclusively that there is little consensus among institutions on college placement standards. Comparing the cut-off scores on a common scale reveals this lack of consensus. To obtain a common scale for comparison in this study, scaled (cut-off) scores were converted to their percentile equivalents. These percentile ranks then serve as the means by which different test scores may be compared.

TABLE 2
High and Low Cut-Off Scores for Placement in College Curriculum with Percentile Equivalents of the Three Nationally Normed Tests Used Most Frequently by SREB Survey Respondents 1985-86

READING

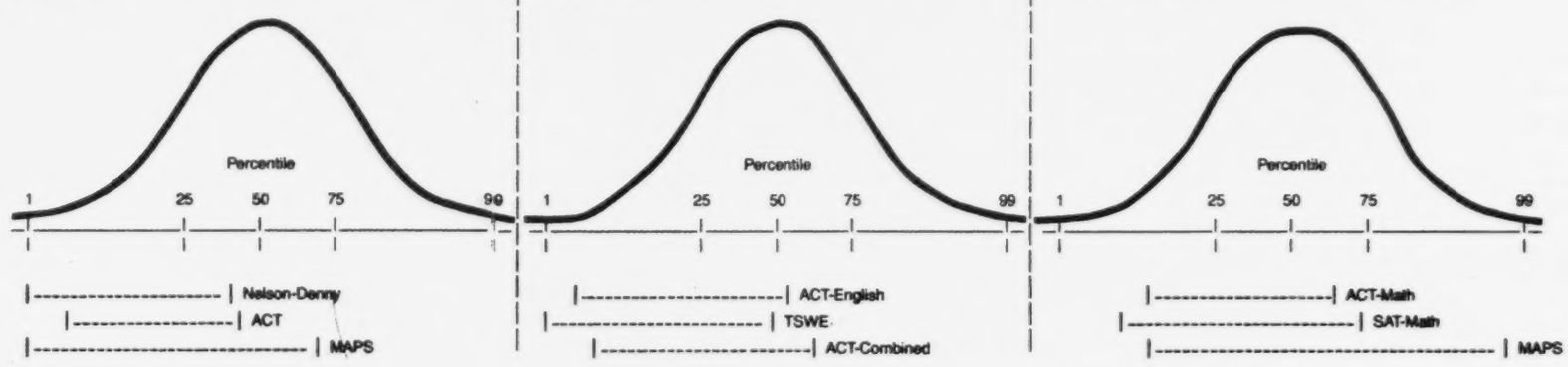
Placement Test	Cut-Off Scores*		Percentile Conversion of Cut-Off Scores	
	Lowest	Highest	Lowest	Highest
Nelson-Denny	7	13	1	43
ACT-Combined	10	18	7	44
MAPS-DTLS	11	19	1	66

WRITING

Placement Test	Cut-Off Scores*		Percentile Conversion of Cut-Off Scores	
	Lowest	Highest	Lowest	Highest
ACT-English	9	19	5	51
TSWE	19	43	1	49
ACT-Combined	10	20	7	56

MATHEMATICS

Placement Test	Cut-Off Scores*		Percentile Conversion of Cut-Off Scores	
	Lowest	Highest	Lowest	Highest
ACT-Math	8	21	14	61
SAT-Math	320	525	10	65
MAPS-DTMS	1	18	14	94



* Cut-off scores are the scaled scores, NOT raw scores.

Table 2 presents the range (lowest to highest) of cut-off scores used by institutions for course placement at the entering college level for the three most frequently used nationally normed tests in reading, writing, and mathematics. Also included are the converted percentile ranks of the low and high cut-off scores. For example, institutions that employ the Nelson-Denny Reading Test for placement set cut-off scores ranging from the 7th grade to the 13th grade reading levels. The range of scores, 7 to 13, is equivalent to a rank from the first percentile to the 43rd. This means that at the low end of the scale, some colleges use placement scores that are the lowest possible—only one percent of all the students across the nation who took the test scored lower. Conversely, at the high end of the scale, some institutions are using cut-off scores at a level for which 43 percent of the testing population scored lower.

Another way of looking at the scores for the Nelson-Denny is that institutions are using placement scores so low that 99 percent of the test takers would have been allowed to enter the "regular" college-level curriculum at that institution. Other institutions are using cut-off scores on the *same test* that would allow only 57 percent of the students taking the test to be placed in entry-level college credit courses.

In each area of curriculum placement (reading, writing, and mathematics), it is startling to note the range of scores being used to place students into college entry-level courses. The most extreme example of this practice is shown for the mathematics MAPS-DTMS test, for which cut-off scores ranged from 1 to 18. The equivalent percentile ranks for these scores are 14 and 94. This means that at an institution using a cut-off score of 1—all but 14 percent earned a score of 1—nearly all students would have been placed in regular college mathematics courses. At the other extreme, in those institutions with a cut-off score of 18, only 6 percent of the students would have been able to enter regular college mathematics courses.

The notion of "college-level" obviously varies greatly among public two-year and four-year institutions in the SREB region. In fact, depending on the test selected, these data indicate that entry-level placement is based on scores that vary from as low as the *1st percentile* to as high as the *94th percentile*. The implications are obvious. It is difficult to discuss such issues as standards, quality, or improving undergraduate education when the notion of "college-level work" varies so widely.

"Variety" in and of itself is not unexpected. For example, readiness for the most selective institutions is not expected to be the same as readiness for the open-door and less selective institutions. However, what can be expected is that there should be some understanding among all colleges as to what standards of skill and knowledge should be expected of all students seeking to enter any institution. This is not to suggest that all institutions should have the same, or a very narrow, definition of college-level work. It does suggest, however, that a "minimum competence" level be established below which degree credit will not be awarded. It also suggests a "floor" of competence on which other distinctions between institutions can be built.

This edition of *Issues in Higher Education* was prepared by Ansley A. Abraham, SREB research associate.

BEST COPY AVAILABLE

College-Level Placement Tests Used by Colleges and Universities in the SREB States

Reading Tests

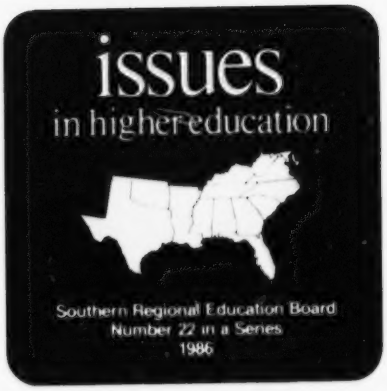
American College Testing (ACT)—Combined
ACT—Social Studies subtest
ACT—English subtest
ACT—Natural Science subtest
Assessment and Placement Services for Community Colleges—Reading
ASSET—Reading
California Achievement Test (CAT)
Carver Reading Progress Scale
College Board Computer Placement Test—Reading
Comprehensive Test of Basic Skills (CTBS)
Davis Reading Test
Gates-MacGinitie
GED Practice Test
Harcourt, Brace, Jovanivich—Audio-Visual Technical Test of Reading
In-house/Institutionally Developed
Iowa Silent Reading Test
McGraw-Hill Reading Test
Multiple Assessement Programs and Services (MAPS)—Descriptive Test of Language Skills (DTLS)—Reading
MAPS—Reading (Self-scoring placement)
MAPS—DTLS—Logical Relationship
MAPS—Comparative Guidance/ Placement(CGP)—Reading Placement
Nelson-Denny Reading Test
Scholastic Aptitude Test (SAT)—Combined
SAT—Verbal
School and College Achievement Test (SCAT)
Stanford Diagnostic Reading Test
Stanford Test of Academic Skills
State/System Developed Test
Test of Academic Skills (TASK)
Test of Adult Basic Education (TABE)

Writing Tests

ACT—Combined
ACT—English Subtest
ACT—Social Studies Section
Assessment and Placement Services for Community Colleges-Essay
Assessment and Placement Services for Community Colleges—Writing
ASSET—Advanced Language Skills
ASSET—Language Usage
California Achievement Test (CAT)
College Board Computer Placement Test—Sentence Skills
College Board—Written English Expression Test
Comprehensive Test of Basic Skills (CTBS)
Cooperative School College Ability Test (SCAT)
Differential Aptitude Test (DAT)—Language Usage
In-house/Institutionally Developed
MAPS—DTLS—Usage Test
MAPS—DTLS—Sentence Structure Test
MAPS—CGP—Writing Placement
MAPS—Written English Expression (Self-scoring placement)
McGraw-Hill Basic Writing
Purdue High School Test of English
SAT—Verbal
SAT—Combined
Stanford Test of Academic Skills
State/System Developed Test
TASK
Test of Adult Basic Education (TABE)
Test of Standard Written English (TSWE)
The Cooperative English Test (CET)
Writing Sample/Essay

Mathematics Tests

ACT—Combined
ACT—Math subtest
Assessment and Placement Services for Community Colleges—Math
ASSET—Intermediate Algebra
ASSET—Elementary Algebra
ASSET—College Algebra
ASSET—Numerical
Association of Community and Junior Colleges Math Placement Test
California Achievement Test (CAT)
College Board Computer Placement Test—Arithmetic
College Board Computer Placement Test—Elementary Algebra
College Entrance Examination Board—Math Achievement Test
The Comprehensive Math Test (CMT)
Comprehensive Test of Basic Skills (CTBS)
Cooperative School College Ability Test (SCAT)
In-house/Institutionally Developed
MAPS—Applied Arithmetic (Self-scoring placement)
MAPS—CGP—Mathematics C, D, and E Tests
MAPS—Computation (Self-scoring placement)
MAPS—Descriptive Test of Mathematics Skills (DTMS)—Arithmetic Skills Test
MAPS—DTMS—Elementary Algebra Skills Test
MAPS—DTMS—Intermediate Algebra Skills Test
MAPS—DTMS—Mathematics Graphs Test
MAPS—Elementary Algebra (Self-scoring placement)
MAPS—Intermediate Algebra
Mathematics Association, American Placement Test Battery
Mathematical Association of America
SAT—Combined
SAT—Math
Speece/Word Mathematics Test
Stanford Test of Academic Skills
State/System Developed Test
TASK
Test of Adult Basic Education (TABE)



592 Tenth Street, N.W.
Atlanta, Georgia 30318-5790

Non-Profit Org.
U.S. POSTAGE
PAID
ATLANTA, GA.
Permit No. 404

When requesting change of address,
please enclose above label.